#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

### WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023143 Address: 333 Burma Road **Date Inspected:** 24-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

**Summary of Items Observed:** 

CWI Inspector: Mr. Cui Zheng Hua

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Ms. Chen Fenglian, stencil 206623 used flux cored welding procedure specification WPS-B-T-2232-ESAB to make OBG segment 14E welds SEG3019AV-041 and SEG3019AV-055. This QA Inspector measured a welding current of approximately 260 amperes (amps) and 26.0 volts. This QA Inspector observed the base materials were preheated with electrical heaters and Ms. Chen Fenglian appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Duan Ziuzhi, stencil 050502 used submerged arc welding procedure specification WPS-B-T-2221-B-L2C-S-2 to complete OBG segment 14E groove weld SEG3019\*-010. This QA Inspector measured a welding current of approximately 660 amps, 36.0 volts and Ms. Duan Ziuzhi appeared to be certified to make this weld. This QA Inspector observed the base materials had been preheated

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with electric heaters prior to welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Changfa, stencil 058102 used shielded metal arc welding procedure specification WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019AH-003. This QA Inspector observed a welding current of approximately 185 amps, the base material had been preheated with electric heaters and Mr. Wang Changfa appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Li, stencil 044772 used shielded metal arc welding procedure specification WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019AH-003. This QA Inspector observed a welding current of approximately 195 amps, the base material had been preheated with electric heaters and Mr. Wang Li appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhao Guanglin, stencil 044779 used shielded metal arc welding procedure specification WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019AWH-094. This QA Inspector observed a welding current of approximately 190 amps, the base material had been preheated with electric heaters and Mr. Zhao Guanglin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Zhengbin, stencil 216086 used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019\*-018. This QA Inspector observed a welding current of approximately 165 amps, the base material had been preheated with electric heaters and Mr. Wang Zhengbin appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.





## **Summary of Conversations:**

See Above.

**Comments** 

# WELDING INSPECTION REPORT

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer